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## Before The FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of	)	West 21 1998
Amendment of Parts 2, 25 and 97 of the	)	ET Docket No. 98-142
Commission's Rules with Regard to the	)	
Mobile-Satellite Service Above 1 GHz	)	

## JOINT COMMENTS

L/Q Licensee, Inc., Globalstar, L.P., and AirTouch Communications, Inc., pursuant to Section 415 of the Commission's Rules, hereby submit these joint comments in the above-referenced docket regarding revisions to Parts 2, 25 and 97 of the Commission's Rules. Specifically, the Commission has proposed to amend Part 2 of its rules by allocating the 5091-5250 MHz and 15.43-15.63 GHz bands to the Fixed-Satellite Service ("FSS") on a co-primary basis for Earth-to-space ("uplink") transmissions and by allocating the 6700-7075 MHz and 15.43-15.63 GHz bands on a co-primary basis for space-to-Earth ("downlink") transmissions. The Commission proposes that these FSS allocations would be designated for use as feeder links in conjunction with non-geostationary ("NGSO") orbit Mobile-Satellite Service ("MSS") systems.

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<sup>&</sup>lt;sup>1</sup> See Notice of Proposed Rule Making, FCC 98-177 (released August 4, 1998) ("NPRM"). Public Notice of the NPRM appeared in the Federal Register on August 20, 1998 (63 Fed. Reg. 44597).

L/Q Licensee, Inc. ("LQL") is the licensee of the Globalstar™ MSS Above 1
GHz satellite system.<sup>2</sup> Globalstar, L.P., a Delaware limited partnership, holds the right to offer capacity on the Globalstar system and owns and operates the international MSS business. AirTouch Communications, Inc. ("AirTouch"), is the United States service provider for Globalstar through its subsidiary AirTouch Satellite Services U.S., Inc.

As the Commission notes in the NPRM (note 17), in November 1996, LQL's authorization for the Globalstar system was modified by assignment of the 5091-5250 MHz (Earth-to-space) and 6875-7055 MHz (space-to-Earth) bands for feeder links.<sup>3</sup> The Commission granted LQL a waiver of the U.S. Table of Frequency Allocations to operate in accordance with the allocations applicable to these bands adopted at the 1995 World Radiocommunication Conference ("WRC-95"). The Commission is now proposing to incorporate the WRC-95 allocations into the U.S. Table of Frequency Allocations, and the Globalstar authorization is subject to any such new rules.<sup>4</sup> Accordingly, LQL, Globalstar and AirTouch all have a substantial interest in the regulations adopted in this proceeding.

LQL, Globalstar and AirTouch generally support the Commission's proposals in the NPRM. As the Commission points out (NPRM, ¶¶ 6-7), the frequency bands

<sup>&</sup>lt;sup>2</sup> See <u>Loral/Qualcomm Partnership, L.P.</u>, 10 FCC Rcd 2333 (Int'l Bur. 1995). The license was later assigned to LQL, a wholly-owned subsidiary of LQP.

<sup>&</sup>lt;sup>3</sup> L/Q <u>Licensee</u>, Inc., 11 FCC Rcd 16410 (Int'l Bur. 1996).

<sup>&</sup>lt;sup>4</sup> Id. at 16413.

under consideration were adopted specifically to accommodate the needs of NGSO MSS systems at the urging of the United States.<sup>5</sup> Indeed, AirTouch is using these bands in connection with preoperational activities at its Clifton, Texas, earth station. Moreover, the technical standards adopted by the ITU for these bands were discussed at WRC-95, and, have been accepted by the satellite industry and the international community. The adoption of these standards for operation within the United States is, under the circumstances, somewhat overdue. Accordingly, as the Commission has proposed, it should incorporate the ITU allocations and attendant footnotes into the U.S. Table of Frequency Allocations.<sup>6</sup>

LQL, Globalstar and AirTouch have two additional comments. First, the Commission may have too restrictive a view on the ability of NGSO MSS systems to share the 6700-7075 MHz band. In paragraph 22 and footnote 53, the Commission suggests that four NGSO MSS systems could share these frequencies with two operating left hand circularly polarized (LHCP) and two right hand circularly polarized (RHCP). In fact, Globalstar operates with both LHCP and RHCP in this band. Two other MSS Above 1 GHz licensees, Mobile Communications Holdings,

<sup>&</sup>lt;sup>5</sup> See id. at 16412.

<sup>&</sup>lt;sup>6</sup> In the <u>NPRM</u>, the Commission has referred generally to the proposed feeder link bands as accommodating the needs of "Big LEO" and MSS Above 1 GHz satellite systems. <u>See NPRM</u>, ¶¶ 3-4. However, other NGSO MSS applicants (e.g., for spectrum at 2 GHz) are also proposing to use these bands for feeder links. To avoid confusion in nomenclature, the Commission should refer to the proposed FSS bands as available simply for NGSO MSS systems without regard to the specific service links.

<sup>&</sup>lt;sup>7</sup> See Application of L/Q Licensee, Inc., at Figure A (filed Mar. 8, 1996).

Inc. ("MCHI"), and Constellation Communications, Inc., also propose to use both LHCP and RHCP in this band.<sup>8</sup> Accordingly, rather than suggesting a specific configuration to coordinate the operation of these systems, LQL, Globalstar and AirTouch believe that the Commission should allow the licensed systems to coordinate with each other when coordination is required.<sup>9</sup> This approach is consistent with the Commission's approach to coordination generally, will provide the parties with the greatest flexibility in coordination and will promote efficient use of the spectrum resource.

Second, proposed Footnote G126 to the U.S. Table should be modified to reflect the results of WRC-95. See NPRM, ¶ 17. Footnote G126 indicates that differential GPS (DGPS) stations may be authorized on a primary basis in the bands 108-117.975 MHz, 1559-1610 MHz, and 5000-5150 MHz for the specific purpose of transmitting DGPS information intended for aircraft navigation.

<sup>&</sup>lt;sup>8</sup> See MCHI's Amendment to Application for Authority to Construction Ellipso<sup>™</sup>, at Table A-5 (Nov. 16, 1994); Constellation's Amendment and Application for Launch and License, Ex. 1, at 2-7 (Nov. 16, 1994).

<sup>&</sup>lt;sup>9</sup> It should be noted that the Commission has directed MCHI and Constellation to demonstrate that they can share this band with Globalstar and other authorized users prior to commencing operation. See Mobile Communications Holdings, Inc., 12 FCC Rcd 9663, 9777-78 (Int'l Bur. 1997); Constellation Communications, Inc., 12 FCC Rcd 9651, 9658 (Int'l Bur. 1997). To date, neither MCHI nor Constellation has provided the required technical demonstration.

<sup>&</sup>lt;sup>10</sup> See Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile-Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, 9 FCC Rcd 5936, 5962-63 (1994).

At WRC-95, a careful time-phased transition strategy was worked out to accommodate the emerging needs of NGSO MSS in the 5 GHz band as well as the current and future needs of the international standard system ("MLS"), as the Commission describes in the NPRM (¶ 11). Prior to January 1, 2010, this strategy emphasized assignments to MLS stations below 5091 MHz, reserving the band 5091-5150 MHz for those requirements which could not be met below 5091 MHz. This strategy also emphasized that in the specific case of MLS, requirements which could not be met in the 5000-5091 MHz band would take precedence over other uses of the 5091-5150 MHz band. This preferential treatment for MLS in the 5091-5150 MHz band does not extend to other Aeronautical Radio-Navigation Service systems which may be developed and deployed in the future (e.g., DGPS).

LQL, Globalstar and Airtouch believe that the U.S. Table should:

(1) specifically take account of the time-phased transition strategy for the 5000-5150 MHz band; and (2) limit DGPS stations to the band 5000-5091 MHz prior to January 1, 2010. After that date, the MSS allocation in the band 5091-5150 MHz becomes secondary. Consequently, the following modification to G126 should be adopted:

G126 — Differential-Global-Positioning-System (DGPS) Stations may be authorized on a primary basis in the bands 108-117.975 MHz, 1559-1610 MHz, and 5000-5150 MHz for the specific purpose of transmitting DGPS information intended for aircraft navigation. In the band 5000-5150 MHz prior to January 1, 2010, assignments to DGPS stations shall be limited to the 5000-5091 MHz band.

With respect to all the feeder link allocations discussed in the NPRM, LQL, Globalstar and AirTouch note that adoption of the proposed allocations is an important step toward providing feederlink spectrum for NGSO MSS systems. However, several NGSO MSS systems have been proposed for licensing in the United States and before other administrations, and additional feeder link spectrum to accommodate these systems is likely needed. This is particularly true since there are stringent technical restrictions on the use of the 15.43-15.63 GHz band for feeder downlinks, which severely limit the usefulness of this 200 MHz segment. See NPRM, ¶¶ 28-30. Indeed, this allocation is currently under consideration in IWG-3 for WRC-99.11 Therefore, the Commission should continue to review options for additional feeder link frequencies to accommodate the needs of future and expanded existing NGSO MSS systems.

<sup>&</sup>lt;sup>11</sup> See WRC-99 Advisory Committee IWG-3, "Work Program," Agenda Item 1.14.

Accordingly, LQL, Globalstar and AirTouch recommend that the Commission adopt the rules proposed in the <u>NPRM</u> with the modifications set forth above.

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## CERTIFICATE OF SERVICE

I, William D. Wallace, hereby certify that I have on this 21st day of September, 1998, caused copies of the foregoing "Joint Comments" to be delivered via hand delivery to the following persons:

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